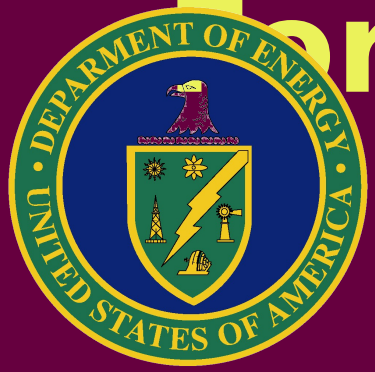
The Intergovernmental Data Quality Task Force (IDQTF)

April 2004



Presented By:

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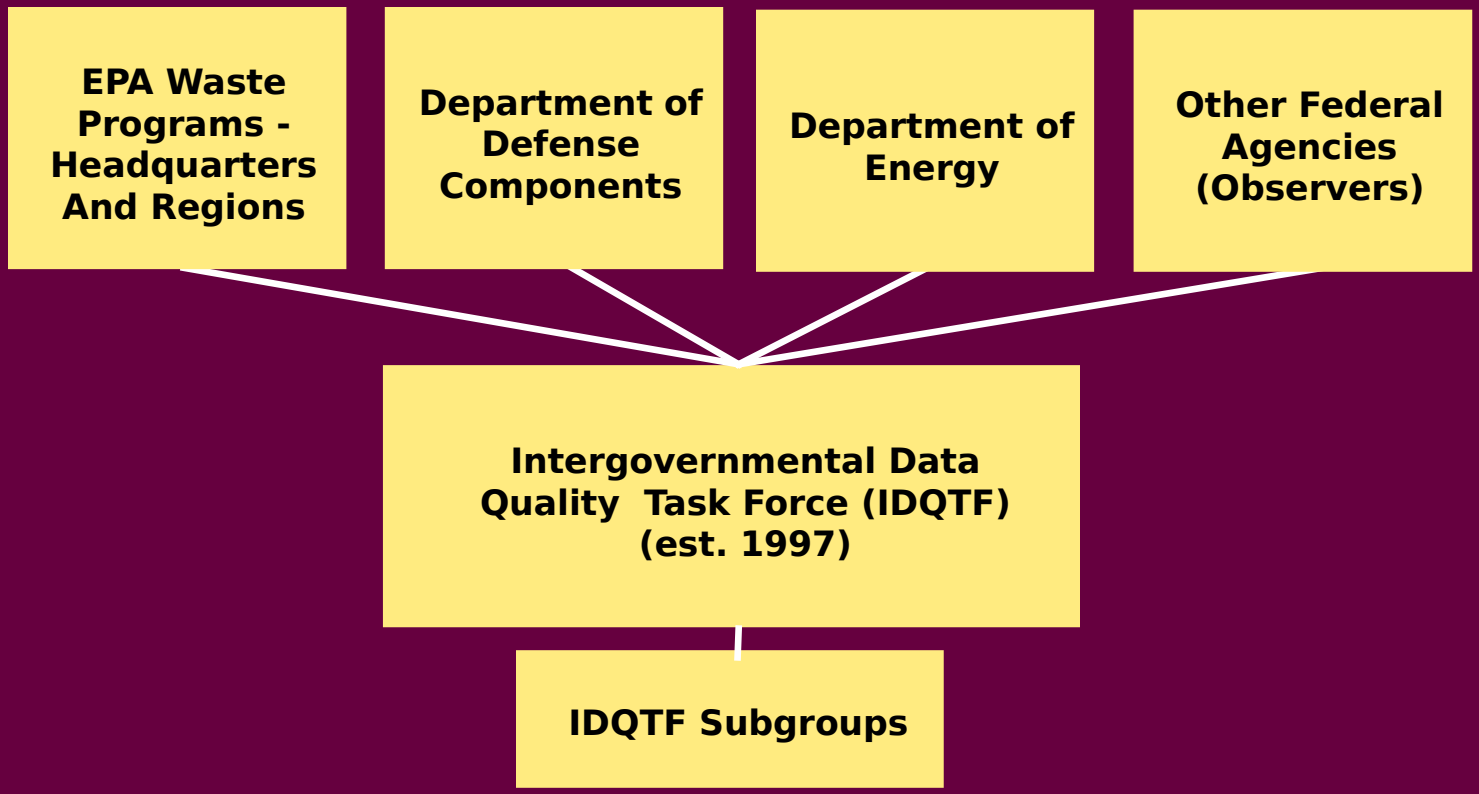
Purpose

- Explain background of IDQTF and its products
- Provide overview of IDQTF products
- Describe IDQTF product implementation plans

What Is the IDQTF?

An interagency partnership with a shared mission and goals


EPA Waste Programs - Headquarters And Regions
Department of Defense Components
Department of Energy
Other Federal Agencies (Observers)
Intergovernmental Data Quality Task Force (IDQTF) (est. 1997)
IDQTF Subgroups

IDQTF Mission and Goals

- **Mission**
  - To document an intergovernmental quality system, beginning with the hazardous waste programs (CERCLA and RCRA)
- **Goals**
  - To document an intergovernmental quality system based on ANSI/ASQC E-4
  - To identify the roles and responsibilities of EPA and other Federal agencies regarding QA/QC oversight
  - To develop guidance for implementing Federal Government-wide requirements and procedures regarding data quality

A Two-Part Quality System

- **Program level – Based on Part A of ANSI/ASQC E-4**
  - Uniform Federal Policy for Implementing Environmental Quality Systems (UFP-QS)
  - Roles and Responsibilities Guidance (appendix)
- **Project level – Implementation guidance for Part B of ANSI/ASQC E-4**
  - Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP)
    - Part 1, Manual
    - Part 2, Supplementary Materials

Status of IDQTF Products

Uniform Federal Policy for Implementing Environmental Quality Systems	Final, signed by all three agencies, January 2003
Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), Manual and Workbook	Review draft, Fall 2003
QA/QC Compendium: Minimum QA/QC Activities	Review draft, Fall 2003
Roles and Responsibilities Guidance, Appendix to UFP-QS	Review draft, Spring 2004

Commitment to IDQTF Product

- Each agency will decide how best to implement products.
- Each agency will be responsible for its own oversight.
- IDQTF will have a continuing role to address issues and ensure improvement.

Potential Impact of IDQTF Products

- **Focus on team-based, front-end planning requires:**
  - More time spent at the beginning of the process
  - Changes in how people think about the way the process is managed
  - A long view of outcomes

IDQTF Products

The Uniform Federal Policy for Implementing Environmental Quality Systems

- A guide for documenting and implementing a quality system
- Consistent with ANSI/ASQC E-4 and EPA Order 5360.1 A2

The Benefits of the UFP-QS

- Improved effectiveness of Federal environmental programs
- Clarification of roles and responsibilities
- Confidence in quality systems to reduce duplication of oversight efforts
- Enhanced accountability and confidence in environmental decisions

How Does the UFP-QS Differ from Existing EPA Guidance Documents?

- Expands quality requirements to other agencies
- Provides more detailed implementation policies and examples
- Reflects needs and practices of participating Federal agencies
- Represents consensus policy based on input from participating Federal agencies.

Applicability

- **Applies to signatory agencies**
  - DoD
  - DOE
  - EPA
- **Initially applicable to hazardous waste programs**

Implementation

- **A multistep process that may take a number of years:**
  - Step 1 – Review existing quality system requirements and document them
  - Step 2 – Identify gaps between what is and what is required
  - Step 3 – Begin to address these gaps, with revisions to quality management plans (QMPs) over time

Agency-Specific Implementation Steps

- EPA OSWER Quality Management Plan
- DoD Quality Assurance/Quality Control Instruction
- DOE O 450.1, Environmental Protection Program

Roles and Responsibilities Guidance, Appendix to UFP-QS

- Establishes general principles for the roles and responsibilities relating to environmental data collection and use at Federal facilities
- Outlines how problems between two agencies can be resolved
- Clarifies the relationships between headquarters and subordinate organizations for quality systems oversight

Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP)

- Provides implementation guidance for project-specific portion of ANSI/ASQC E-4 (Part B)
- Provides a structured, standardized approach to planning for and conducting environmental data collection operations
- Uses common format that promotes easier review
- Covers all essential elements of the systematic planning process (SPP)
- Is consistent with EPA guidance

The UFP-QAPP Approach

- **Walks the user through each stage of the SPP**
- **Provides optional fill-in-the-blank**

Figure UFP-Example Measurement Performance Criteria Table

Medium/Matrix	*Ground Water*
Analytical Parameter	*VOA*
Concentration Level	*Low*

Sampling Procedure	Analytical Method/SOP	Data Quality Indicators (DQIs)[1]	Measurement Performance Criteria	QC Sample and/or Activity Used to Assess Measurement Performance	QC Sample Assesses Error for Sampling (S), Analytical (A) or both (S&A)
S-1	*L-1*	*Precision-Overall*	*RPD≤30% when VOC detects for both field duplicate samples are ≥ QL. RPD ≤ 40% when gaseous VOC detects for both field duplicate samples are ≥ QL.*	*Field Duplicates*	*S+A*
		Precision-Lab	*RPD≤20% when VOC detects for both laboratory duplicate samples are ≥ QL. RPD ≤ 30% when gaseous VOC detects for both laboratory duplicate samples are ≥ QL.*	*Matrix Spike/Matrix Spike Duplicates*	*A*
		Accuracy/bias	*±20% VOCs except volatile gases ±40%*	*Matrix Spike/Matrix Spike Duplicates*	*A*
		Accuracy/bias	*No false negatives, no false positives, quantitation within warning limits (±2σ)*	*Single Blind PES*	*A*
		Accuracy/bias-Contamination	*No target compounds ≥ QL*	*Equipment Blanks, Trip Blanks, Method Blanks & Instrument Blanks*	*S+A*
		Sensitivity	*±40% @ QL*	*Laboratory Fortified Blank @ QL*	*A*

[1]Data Quality Indicators (a.k.a. PARCC parameters, i.e., precision, accuracy/bias, sensitivity, data completeness, comparability)

EXAMPLE

UFP-QAPP Organization

- **Part 1, Manual – Provides instructions for preparing QAPPs.**
- **Part 2, supplementary materials**
  - Part 2A, Workbook
  - Part 2B, QA/QC Compendium
  - Part 2C, Example QAPP

How Will the UFP-QAPP Be Implemented?

- Voluntary adoption of the UFP-QAPP by programs and agencies
- Applicable to future QAPPs only
- Systematic training
- Potentially useful for all environmental programs
- Current status: Review draft out; comments due January 2004

What Is the QA/QC Compendium?

- Identifies minimum QA/QC activities for Superfund
- Will reduce conflicts by standardizing QA/QC practices
- Preserves the data quality objectives process by recognizing the role of site-specific decisions
- Is based on analysis of current practices and best value
- Will be implemented as Part 2B of the UFP-QAPP

What is the content of the QA/QC Compendium?

- **List of carefully defined minimum QA/QC activities for each phase of Superfund**
- **Text addressing:**
  - Use of screening and definitive data
  - Definitions of QA/QC measures
  - Added value of commonly used QC samples
  - Scope and steps of data review

Conclusion

Status of Products

- UFP-QS - IDQTF consensus final document, implementation efforts underway
- UFP-QAPP - Interagency review and approval process underway
- Roles and Responsibilities Guidance, appendix to UFP-QS - Due to be released for review spring 2004

Implementation Challenges

- Introduce products throughout agencies
- Provide consistent training
- Involve other stakeholders